AP4 Rec'd PCT/PTO 0 6 DE C92 10152-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| TRANSMITTAL LETTER DESIGNATED/ELECTE | ATTORNEY'S DOCKET NUMBER | | | | | | | | | |
|---|---|-------------------------------------|--|--|--|--|--|--|--|--|
| | U.S. @P@CAFION NO. (If known, the CFR 1.5) | | | | | | | | | |
| | SION UNDER 35 U.S.C. 371 | 10/999/42 | | | | | | | | |
| INTERNATIONAL APPLICATION NO. PCT/US2004/018219 | June 8, 2004 | PRIORITY DATE CLAIMED June 9, 2003 | | | | | | | | |
| TITLE OF INVENTION | Julie 9, 2003 | | | | | | | | | |
| ESTIMATION OF BACKGROUND NOISE AND ITS EFFECT ON SONAR RANGE ESTIMATION | | | | | | | | | | |
| APPLICANT(S) FOR DO/EO/US | | | | | | | | | | |
| Nathan Intrator, Leon N. Cooper, Nicola Neretti | | | | | | | | | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | | | | | | | | | |
| 1. X This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | | | |
| 2. La This is a SECOND or SUBSEQUENT : | This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | | |
| This express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. | | | | | | | | | | |
| . X The US has been elected (Article 31). | | | | | | | | | | |
| 5. X A copy of the International Application as filed (35 U.S.C. 371(c)(2)) | | | | | | | | | | |
| a. | | | | | | | | | | |
| b. | the International Bureau. | | | | | | | | | |
| c. is not required, as the applica | c. \square is not required, as the application was filed in the United States Receiving Office (RO/US). | | | | | | | | | |
| An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). | | | | | | | | | | |
| a. is attached hereto. | | | | | | | | | | |
| b. had been previously submitted under 35 U.S.C. 154(d)(4). | | | | | | | | | | |
| Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) | | | | | | | | | | |
| a. \square are attached herewith (required only if not communicated by the International Bureau). | | | | | | | | | | |
| b. have been communicated by | b. have been communicated by the International Bureau. | | | | | | | | | |
| c. have not been made; however | c. have not been made; however, the time limit for making such amendments has NOT expired. | | | | | | | | | |
| d. X have not been made and will | d. X have not been made and will not be made. | | | | | | | | | |
| 8. An English language translation of the | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). | | | | | | | | | |
| 9. X An oath or declaration of the inventor(s | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (signed) | | | | | | | | | |
| O. An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | | | | | | | | | |
| Items 11 to 20 below concern document(s | • | | | | | | | | | |
| 11. X An Information Disclosure Statement u | | | | | | | | | | |
| 12. An assignment document for recording | . A separate cover sheet in compliance with 37 CFF | R 3.28 and 3.31 is included. | | | | | | | | |
| 13. A preliminary amendment. | | | | | | | | | | |
| 14. An Application Data Sheet under 37 CF | FR 1.76. | | | | | | | | | |
| 15. A substitute specification. | | | | | | | | | | |
| 16. A power of attorney and/or change of a | ddress letter. | | | | | | | | | |
| 17. A computer readable form of the seque | A computer readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. | | | | | | | | | |
| 18. A second copy of the published Interna | tional Application under 35 U.S.C. 154(d)(4). | <u> </u> | | | | | | | | |
| 19. A second copy of the English language | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). | | | | | | | | | |
| 20. Other items or information: | | | | | | | | | | |
| | | | | | | | | | | |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Page 1 of 2

Express Mail No.:

TERECE LUMBIO US DEC 2005

| U.S. APPLICATION NO (II known/see 37 CFR 1.5) | | | INTERNATIONAL APPLICATION NO | | | | ATTORNEY'S DOCKET NUMBER BRUN-001XX | | |
|--|---|-------------------------------|-----------------------------------|--|----------------------------|-------------|-------------------------------------|----------|--|
| - | | PCT/US2004/018219 | | | | | | | |
| The following fees have been submitted: | | | | | | CAL | CALCULATIONS PTO USE ONLY | | |
| 21. 🗵 Basi | | | | | | | 0.00 | | |
| 22. Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) | | | | | | \$100.00 | | | |
| | ch fee | | | <u> </u> | <u> </u> | | | - | |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority \$100.00 International Search Report prepared and provided to the Office \$400.00 All other situations \$500.00 | | | | | | \$10 | 0.00 | | |
| TOTAL OF 21, 22 and 23 = | | | | | | \$50 | 0.00 | | |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof. | | | | | | | | | |
| Total Sheets | Extra Sheets | | | ditional 50 or fraction o a whole number) | RATE | \$0 | | | |
| - 100 = | /50 = | mereor (it | zano up t | o a whole humber) | X \$250.00 | \$0 | | | |
| | Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest | | | | | | | | |
| | ed priority date (37 CFR 1.492(h)). CLAIMS NUMBER FILED NUMBER EXTRA RATE | | | | | | | | |
| Total claims | | | | | × \$ 50.00 | \$65 | 0.00 | | |
| Independent cla | | | 3 = | 1 | X \$200.00 | \$20 | 0.00 | | |
| MULTIPLE DEP | PENDENT CLAIM | (S) (if applical | | <u> </u> | + \$360.00 | \$0 | | | |
| | | <u></u> | | TOTAL OF ABOVE CAL | CULATIONS = | | 50.00 | | |
| Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. | | | | | | \$67 | | | |
| Dropping for | -f \$420.00 for free | ichina the En | aliah tran | alation later than 20 man | SUBTOTAL = | \$67 | 5.00 | <u> </u> | |
| the earliest clain | Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(I)). | | | | | | | | |
| TOTAL NATIONAL FEE = | | | | | \$675.00 | | | | |
| Fee for recording accompanied by | g the enclosed as | signment (37 over sheet (3 | CFR 1.2 ⁻ 7 CFR 3.2 | 1(h)). The assignment m 28, 3.31). \$40.00 per pro | ust be perty + | \$0 | | | |
| TOTAL FEES ENCLOSED = | | | | | | \$675.00 | | | |
| | | | | | | | ount to be unded: | \$ | |
| | | | | | | Am | ount to be | \$ | |
| a. A check in the amount of \$675.00 to cover the above fees, except assignment recordation, is enclosed. A check in the amount of \$ is enclosed for the assignment recordation fee. | | | | | | | | | |
| b. Please charge my Deposit Account No in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. | | | | | | | | | |
| c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Deposit Account No. <u>23-0804</u> . A duplicate copy of this sheet is enclosed. | | | | | | | | | |
| d. Fees are to be charged to a credit card. WARNING : Information on this form may become public. Credit card information should not be included on this form . Provide credit card information and authorization on PTO-2038. | | | | | | | | | |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. | | | | | | | | | |
| SEND ALL CORRESPONDENCE TO: which is associated with the Law Firm of: | | | | | | | | | |
| [X] | Ten Post Office Square Boston, Massachusetts 02109 United States | | | | | | | | |
| | Telephone: (617) 542-2290 Fax: (617) 451-0313 Attorney Signature: | | | | | | | | |
| Attorney Signat | ture: // www. | y u | | Date:/2-6 | -05 | | | | |
| Attorney Name: Victor B. Lebovici Registration No: 30,864 | | | | | | | | | |
| FORM PTO-1390 (RE | EV. 02-2005) WSGL/32 | 9814 | | Page 2 of | 2 | | | | |